Article Index
January—June 1982

D (Design Ideas); F (Features); M (μC Design Techniques); N (Technology Update); P (Feature Products, Editor's Choice); QL (Question of Law)

Circuit/Systems Design

16-bit μP peripheral ICs provide datacomm support. Feb 17, pg 181 (F)

2 ICs implement fast-ON, slow-OFF switching. Apr 28, pg 158 (D)

5 ICs match 8-bit μCs to 16-bit DACs. Apr 28, pg 158 (D)

5-chip circuit debugs 6800 firmware. Jan 6, pg 214 (M)

Amplifier increases scope sensitivity. Mar 17, pg 186 (D)

Analyze complex circuits with a matrix-inversion program. Mar 17, pg 131 (F)

Avoid refresh-timing conflicts in μC memory expansion. Jan 20, pg 117 (F)

Bias Hall sensors for minimum drift. Mar 17, pg 180 (D)

CMOS gates limit pulse rep rates. May 12, pg 210 (D)

Combine DACs and power amps to digitally control large loads. Mar 17, pg 171 (F)

Consider basic parameters when choosing S/D converters. June 23, pg 125 (F)

Construct a circular clock with LEDs. May 12, pg 218 (M)

Construct your own universal development system. June 9, pg 131 (F)

Converter monitors supply voltage, current. June 23, pg 194 (D)

Counter scheme provides ac-mains control. June 23, pg 193 (D)

Decoder forms mutually exclusive latch. Mar 17, pg 179 (D)

Design active elliptic filters with a 4-function calculator. Mar 3, pg 135 (F)

Detect and correct errors without slowing bus traffic. Mar 31, pg 155 (F)

Differential sensor uses two wires. Mar 31, pg 167 (D)

Differing product-safety needs needn't bar universal designs. May 26, pg 181 (F)

Digital counters replace one-shots. Jan 20, pg 152 (D)

Digital filter varies cutoff frequency. Apr 28, pg 163 (M)

Digital-only PLL exhibits no overshoot. May 26, pg 206 (D)

Digital-readout phase meter holds ½° accuracy. June 9, pg 177 (D)

Digitally control filter gain, cutoff. Mar 3, pg 158 (D)

Digitally test analog gain bandwidths. Feb 17, pg 208 (D)

Distortion problems bow to a wide-band power op amp. Apr 14, pg 149 (F)

Dual LEDs signal a diode's status. Feb 17, pg 212 (D)

Dual flip flops single-step a Z80. May 12, pg 207 (D)

Eliminate system growth pains with a μP/controller interface. Mar 3, pg 117 (F)

Exotic-transducer interfacing calls for proven techniques. Feb 17, pg 195 (F)

Expand linear circuit functions with nonlinear design schemes. May 12, pg 153 (F)

Extend μC capability via multiprocessing. Apr 14, pg 175 (F)

Flip flops deglitch PROM output. Mar 31, pg 166 (D)

Frequency-divider systems increase flexibility, save parts. June 9, pg 141 (F)

Generate sine waves by direct table look-up. Apr 28, pg 101 (F)

Great Gator Giveaway—Part 1: Winning MUX applications. May 12, pg 171 (F)

Great Gator Giveaway—Part 2: Winning op-amp applications. May 26, pg 197 (F)

Handheld μC aids low-pass-filter design. Apr 14, pg 201 (M)

High accuracy with standard ICs: an elegant ADC's forte. Apr 28, pg 137 (F)

High-voltage regulator uses power MOSFET. Jan 6, pg 213 (D)

ICs' hidden features enhance counter-based designs. Mar 17, pg 163 (F)

Improve amplifier performance with MOSFET output circuits. Feb 3, 153 (F)

Improve datacomm links by using Manchester code. Feb 17, pg 155 (F)

Improve function generators with matched D/A converters. May 12, pg 161 (F)

Inexpensive μP-based DAS uses little external logic. May 26, pg 189 (F)

Interface bipolar PROMs and CMOS μPs. June 9, pg 183 (M)

Interface nonstandard sensors using standard circuit methods. Feb 3, pg 127 (F)

Interface speeds bus data swaps. Mar 3, pg 160 (D)

Loss-budgeting techniques simplify fiber-optic links. Apr 14, pg 159 (F)

Low-cost rms/dc ICs upgrade ac measurements. Jan 20, pg 101 (F)

Modified sync separator uses fewer ICs. May 26, pg 204 (D)

Mold nonlinear circuit response with a multifunction converter. June 9, pg 165 (F)

NAND simplifies optical transmitter. Jan 6, pg 212 (D)

OR gates overcome timer drawback. Feb 3, pg 179 (M)

Off-chip diodes protect on-chip devices. June 23, pg 198 (D)

One IC debounces six switches. Mar 17, pg 180 (D)

Optical sensor ignores ambient light. Jan 20, pg 151 (D)

Optoisolator simplifies current pulser. Feb 3, pg 176 (D)

Picoammeter/calibrator system eases low-current measurements. Mar 31, pg 143 (F)

PLL IC aids μP in baud-rate generation. June 9, pg 173 (D)

Proposed multichannel sound systems promise high-fidelity stereo TV. Mar 3, pg 57 (N)

Prototype photovoltaic system shows promise, could succeed despite budget cuts. May 12, pg 59 (N)

RAM/DAC mix yields scope displays. May 12, pg 212 (D)

Ready for digital audio? It might arrive sooner than you think. Feb 3, pg 61 (N)

Reduce digital-audio distortion with a special-purpose DAC. June 9, pg 151 (F)

Register simplifies pipeline processor. Feb 3, pg 173 (D)

Regulator IC controls program voltage. Mar 31, pg 165 (D)

Article Index
January-June 1982

Single-chip FSK modem expands your design choices. May 12, pg 143 (F)

Speed μP arithmetic functions while using less software. May 26, pg 167 (F)

Stable pulser varies rate, width, delay. Apr 28, pg 154 (D)

Switched-capacitor ICs improve filter specs, ease design. June 23, pg 183 (F)

Sync separator provides speed, accuracy. Jan 6, pg 207 (D)

Take a total-system approach, with advanced CMOS memories. Apr 28, pg 117 (F)

Tame transducer bridge errors with op-amp feedback control. May 26, pg 173 (F)

Timer protects CRT phosphors. Feb 3, pg 169 (D)

Transformers and optocouplers implement isolation techniques. Jan 6, pg 115 (F)

Two ICs measure waveform levels. Feb 17, pg 216 (D)

Two ICs provide wide-ranging pulses. May 26, pg 203 (D)

Two diodes provide a 99:1 duty cycle. Feb 17, pg 221 (D)

Up/down counters set signal's duty cycle. Mar 3, pg 157 (D)

Use flash ADCs carefully to handle high-frequency signals. Mar 17, pg 137 (F)

Use off-the-shelf linear ICs for sophisticated audio designs. Mar 3, pg 109 (F)

Variable-Q bandpass filter fixes gain. Apr 28, pg 153 (D)

XOR gate controls oscillator frequency. Apr 14, pg 196 (D)

Semiconductors/ICs

2 ICs implement fast-ON, slow-OFF switching. Apr 28, pg 158 (D)

200V p-channel MOSFETs extend complementary symmetry range. Apr 28, pg 170 (P)

40A, 1100/1200V power transistor switches at 20 kHz. May 12, pg 242 (P)

5 ICs match 8-bit μCs to 16-bit DACs. Apr 28, pg 158 (D)

64k CMOS EPROM achieves NMOS speed. Mar 31, pg 173 (P)

Alterable-memory innovations enhance new-product designs (EDN Programmable-Memory Directory). Jan 20, pg 88 (F)

Although CCD imagers gain on vidicons, promising newcomers wait in wings. Apr 14, pg 101 (N)

Amplifier increases scope sensitivity. Mar 17, pg 186 (D)

Analog-to-digital converter operates to 125°C. Mar 3, pg 83 (P)

Arithmetic chips assume greater importance as μC users demand faster response. Apr 14, pg 61 (N)

Ask the key questions when buying a custom IC. Mar 17, pg 145 (F)

Bias Hall sensors for minimum drift. Mar 17, pg 180 (D)

CMOS devices dominate analog switches, but mixed technology might supplant them. Feb 17, pg 87 (N)

CMOS gates limit pulse rep rates. May 12, pg 210 (D)

CMOS multiplying-DAC chip serves digital-audio-disk uses. Apr 28, pg 77 (P)

Combine DACs and power amps to digitally control large loads. Mar 17, pg 171 (F)

Consider basic parameters when choosing S/D converters. June 23, pg 125 (F)

Construct a circular clock with LEDs. May 12, pg 218 (M)

Converter monitors supply voltage, current. June 23, pg 194 (D)

Counter scheme provides ac-mains control. June 23, pg 193 (D)

Data-encryption chips provide security—or is it false security? Feb 17, pg 39 (N)

Decoder forms mutually exclusive latch. Mar 17, pg 179 (D)

Differential sensor uses two wires. Mar 31, pg 167 (D)

Digital counters replace one-shots. Jan 20, pg 152 (D)

Digital filter varies cutoff frequency. Apr 28, pg 163 (M)

Digital-only PLL exhibits no overshoot. May 26, pg 206 (D)

Digital-readout phase meter holds ½° accuracy. June 9, pg 177 (D)

Digitally control filter gain, cutoff. Mar 3, pg 158 (D)

Distortion problems bow to a wide-band power op amp. Apr 14, pg 149 (F)

Dual LEDs signal a diode's status. Feb 17, pg 212 (D)

Dual flip flops single-step a Z80. May 12, pg 207 (D)

Dual matched 8-bit CMOS DACs come in single inexpensive package. Jan 6, pg 77 (P)

Eliminate system growth pains with a μP/controller interface. Mar 3, pg 117 (F)

Exotic-transducer interfacing calls for proven techniques. Feb 17, pg 195 (F)

Expand linear circuit functions with nonlinear design schemes. May 12, pg 153 (F)

Fast-settling wide-band op amps meet military requirements. June 23, pg 208 (P)

Flip flops deglitch PROM output. Mar 31, pg 166 (D)

Frequency-divider systems increase flexibility, save parts. June 9, pg 141 (F)

GaAs technology continues to advance, but proponents fear credibility window. Feb 17, pg 73 (N)

Great Gator Giveaway—Part 1: Winning MUX applications. May 12, pg 171 (F)

Great Gator Giveaway—Part 2: Winning op-amp applications. May 26, pg 197 (F)

Hallmark of the newest prescaler ICs: digital frequency synthesis to 1.5 GHz. June 9, pg 57 (N)

High accuracy with standard ICs: an elegant ADC's forte. Apr 28, pg 137 (F)

High-performance voice-output chip improves speech, uses less memory. May 26, pg 218 (P)

High-speed 12×12-bit multiplier delivers product in 50 nsec. Apr 14, pg 209 (P)

High-voltage regulator uses power MOSFET. Jan 6, pg 213 (D)

Hybrid 12-bit A/D converter features μP-compatible interface. May 26, pg 221 (P)

Hybrid D/A converter suits digital-audio applications. June 23, pg 95 (P)

Hybrid track/hold amplifier combines high speed, low power. Apr 14, pg 123 (P)

ICs' hidden features enhance counter-based designs. Mar 17, pg 163 (F)

ISSCC 82 technical sessions take aim at practical applications. Feb 3, pg 53 (N)

Improve amplifier performance with MOSFET output circuits. Feb 3, 153 (F)

Improve function generators with matched D/A converters. May 12, pg 161 (F)

Increased T/H-amp speed and resolution advance data-acquisition technology. Apr 14, pg 41 (N)

Industrial-grade analog ICs operate from unregulated supplies. Apr 14, pg 121 (P)

Interface nonstandard sensors using standard circuit methods. Feb 3, pg 127 (F)

Isolation-amplifier designs sport extended operational limits. Apr 14, pg 81 (N)

Latest-generation floating-gate EEPROM adds speed and convenience features. May 26, pg 92 (P)

Low-cost 16-bit monolithic DAC achieves hybrid-like performance. Mar 3, pg 81 (P)

Low-cost 7-bit flash A/D converters sample at 15-MHz data rate. May 26, pg 89, (P)

Low-cost hybrid A/D converter offers high-speed performance. June 9, pg 186 (P)

Low-cost rms/dc ICs upgrade ac measurements. Jan 20, pg 101 (F)

Low-noise precision dual op amps provide guaranteed matching specs. May 12, pg 75 (P)

Low-noise topologies, innovative designs to be spotlighted at Powercon 9. June 9, pg 75 (N)

Low-power CMOS static ROM accesses 8k bytes in 450 nsec max. Jan 6, pg 78 (P)

Low-voltage CMOS gate array provides DMOS output drivers. June 9, pg 93 (P)

Article Index
January-June 1982

Military and high-reliability hybrids (Special Report). June 23, pg 102 (F)

Military, energy-related demands spur high-temperature-IC development. June 23, pg 59 (N)

Miniature fiber-optic data link suits pc-board mounting. Feb 17, pg 236 (P)

Modified sync separator uses fewer ICs. May 26, pg 204 (D)

Mold nonlinear circuit response with a multifunction converter. June 9, pg 165 (F)

Monolithic 4-bit quantizer converts at 100 MHz. Mar 31, pg 174 (P)

Monolithic thermocouple conditioner provides cold-junction compensation. June 9, pg 89 (P)

NAND simplifies optical transmitter. Jan 6, pg 212 (D)

New-generation CRT-controller ICs cut display costs, increase capabilities. May 12, pg 39 (N)

OR gates overcome timer drawback. Feb 3, pg 179 (M)

Off-chip diodes protect on-chip devices. June 23, pg 198 (D)

One IC debounces six switches. Mar 17, pg 180 (D)

Optical sensor ignores ambient light. Jan 20, pg 151 (D)

Optoisolator simplifies current pulser. Feb 3, pg 176 (D)

Parallel interface/timer chip simplifies peripheral control. Jan 20, pg 131 (F)

PLL IC aids μP in baud-rate generation. June 9, pg 173 (D)

Precision voltage references guarantee long-term stability. May 26, pg 216 (P)

Pulse-width-modulator control system satisfies switching-power-supply needs. Feb 3, pg 184 (P)

RAM/DAC mix yields scope displays. May 12, pg 212 (D)

Reduce digital-audio distortion with a special-purpose DAC. June 9, pg 151 (F)

Register simplifies pipeline processor. Feb 3, pg 173 (D)

Regulator IC controls program voltage. Mar 31, pg 165 (D)

Remote-control transmitter/receiver chips exhibit enhanced capabilities. Mar 3, pg 71 (N)

Single-chip FSK modem expands your design choices. May 12, pg 143 (F)

Stable pulser varies rate, width, delay. Apr 28, pg 154 (D)

Switched-capacitor ICs improve filter specs, ease design. June 23, pg 183 (F)

Sync separator provides speed, accuracy. Jan 6, pg 207 (D)

Take a total-system approach, with advanced CMOS memories. Apr 28, pg 117 (F)

Tame transducer bridge errors with op-amp feedback control. May 26, pg 173 (F)

Telecomm ICs and microcomputers compete in offering more user features. Feb 17, pg 61 (N)

Timer protects CRT phosphors. Feb 3, pg 169 (D)

Two ICs measure waveform levels. Feb 17, pg 216 (D)

Two ICs provide wide-ranging pulses. May 26, pg 203 (D)

Two diodes provide a 99:1 duty cycle. Feb 17, pg 221 (D)

Up/down counters set signal's duty cycle. Mar 3, pg 157 (D)

Use flash ADCs carefully to handle high-frequency signals. Mar 17, pg 137 (F)

Use off-the-shelf linear ICs for sophisticated audio designs. Mar 3, pg 109 (F)

Variable-Q bandpass filter fixes gain. Apr 28, pg 153 (D)

VLSI chip eases access to MIL-STD-1553B data bus. June 23, pg 87 (P)

XOR gate controls oscillator frequency. Apr 14, pg 196 (D)

μPs/μCs

16-bit μP peripheral ICs provide datacomm support. Feb 17, pg 181 (F)

5-chip circuit debugs 6800 firmware. Jan 6, pg 214 (M)

¼-in. cartridge-tape drive employs GCR, data management. Apr 28, pg 81 (P)

Add a flag register to the 9900 μP. Apr 14, pg 201 (M)

Add-in PROM-simulator board supports firmware development. Apr 14, pg 210 (P)

Analyze complex circuits with a matrix-inversion program. Mar 17, pg 131 (F)

Arithmetic chips assume greater importance as μC users demand faster response. Apr 14, pg 61 (N)

As μP/μC chips mature, support chips proliferate (EDN μC Support Chip Directory). Jan 6, pg 155 (F)

Avoid dangerous 6502 addressing modes. Jan 6, pg 214 (M)

Avoid refresh-timing conflicts in μC memory expansion. Jan 20, pg 117 (F)

BASIC calculates standard resistances. Mar 3, pg 167 (M)

Board-level 16-bit computers use chip version of minicomputer. May 12, pg 230 (P)

Briefcase-sized 16-bit microcomputer sports flat-panel EL display, bubble memory. May 26, pg 216 (P)

Call machine code from Tiny BASIC. Feb 17, pg 223 (M)

Capable engineering-software packages bring design power to desktop μCs. Mar 3, pg 45 (N)

Compare IRA benefits using BASIC program. Apr 28, pg 163 (M)

Compress ROM programs with a math-function interpreter. Mar 31, pg 161 (F)

Data-acquisition controller uses ASCII programming. June 23, pg 203 (P)

Data-acquisition system provides continuous throughput. May 12, pg 77 (P)

Desktop engineering computers (Special Report). May 26, pg 150 (F)

Detect and correct errors without slowing bus traffic. Mar 31, pg 155 (F)

Development system generates vocabulary for voice synthesizers from two vendors. Mar 31, pg 172 (P)

Dial-up weather-report system tests viability of voice response. Apr 28, pg 37 (N)

Dual flip flops single-step a Z80. May 12, pg 207 (D)

Dual-bus computer family serves 68000, 8086 μPs. Feb 17, pg 101 (P)

EDN Software Tutorial: Symbol tables. Mar 3, pg 141 (F)

EEPROM eases PROM-programmer updates. Feb 17, pg 223 (M)

European military electronics spans avionics, μCs, IR imaging, comm. June 23, pg 67 (N)

Extend μC capability via multiprocessing. Apr 14, pg 175 (F)

Extended development-system tools completely support Intel μPs. Feb 17, pg 226 (P)

Format FPAL numbers in FORTRAN style. Mar 31, pg 168 (M)

FORTRAN algorithm finds partial sums. May 26, pg 211 (M)

Generate sine waves by direct table look-up. Apr 28, pg 101 (F)

Generate symbol lists for the Aim-65. Mar 17, pg 188 (M)

Generate truth tables with BASIC. June 23, pg 200 (M)

Great Gator Giveaway—Part 1: Winning MUX applications. May 12, pg 171 (F)

Handheld μC aids low-pass-filter design. Apr 14, pg 201 (M)

Hardware enhancements, software packages increase μC communications capabilities. Feb 17, pg 53 (N)

High-speed 16-bit microsystem features virtual memory access. Mar 31, pg 171 (P)

IEEE-696-compatible microcomputer board includes OS firmware, floating-point chips. Mar 3, pg 89 (P)

Implement fast branching jumps on the 8086. May 12, pg 226 (M)

Improve 8080/8085 interrupt response. June 9, pg 181 (M)

Increased chip capabilities expand board-μC possibilities (EDN Board-Level-μP-System Directory). Mar 31, pg 70 (F)

Independents jump on the IBM bus with Personal Computer add-ons. Mar 17, pg 81 (N)

Industrial-grade CMOS computer boards serve in harsh real-time environments. Feb 17, pg 232 (P)

Article Index
January-June 1982

Inexpensive μP-based DAS uses little external logic. May 26, pg 189 (F)

Instant RS-232 interface adapter mates serial devices with μCs. Jan 6, pg 263 (P)

Intelligent programmable-controller IC employs 3-level architecture. May 12, pg 78 (P)

Interface bipolar PROMs and CMOS μPs. June 9, pg 183 (M)

Interface speeds bus data swaps. Mar 3, pg 160 (D)

Link CMOS logic to a 6809 μP. Mar 17, pg 190 (M)

Low-cost color-graphics terminals aim at business-system demands. May 26, pg 45 (N)

Low-cost microcomputer board suits control applications. Jan 6, pg 261 (P)

Low-profile floppy-disk drive suits low-cost applications. May 12, pg 234 (P)

MC68000-family virtual-memory processor adds performance, retains compatibility. Mar 17, pg 109 (F)

Menu-driven communications package interfaces with any μP. June 23, pg 207 (P)

Microprocessor development systems (Special Report). Apr 28, pg 86 (F)

Multibus-compatible board converts text to speech. Apr 28, pg 170 (P)

Multibus-compatible controller board interfaces μC to Ethernet. Mar 31, pg 63 (P)

Multibus-compatible hard-disk controller supports four ¼-in. tape drives. Apr 14, pg 125 (P)

Multibus-compatible memory boards feature ECC, memory management. May 12, pg 238 (P)

One instruction linearizes 2920 output. Jan 20, pg 158 (M)

Parallel interface/timer chip simplifies peripheral control. Jan 20, pg 131 (F)

Personal computers stress price/performance, IBM communications, color capability. Mar 31, pg 38 (N)

Portable μC system accommodates any CRT. Jan 20, pg 161 (P)

Q-bus-compatible μC packs extra math, debugging punch. June 23, pg 97 (P)

Real-time micro and minicomputers execute 1 million instructions/sec. Apr 14, pg 205 (P)

SOS 16-bit-μP chip set executes military instructions. June 23, pg 203 (P)

Software package simplifies use of CP/M and MP/M operating systems. Jan 6, pg 227 (P)

Software package's program modules combine to form Z80 operating system. Feb 17, pg 232 (P)

Solve process-control problems with ADA's special capabilities. June 23, pg 143 (F)

Speed μP arithmetic functions while using less software. May 26, pg 167 (F)

Telecomm ICs and microcomputers compete in offering more user features. Feb 17, pg 61 (N)

Three μC bus configurations vie for 16-bit Eurocard ascendancy. Mar 31, pg 51 (N)

Turn I/O data port into speech port. May 26, pg 212 (M)

Understand program structure to fathom 432 operation. Jan 6, pg 147 (F)

Versatile floppy-disk controller supports 5¼- and 8-in. drives. Jan 6, pg 262 (P)

Weigh all make-vs-buy factors for custom/semicustom ICs. Mar 3, pg 127 (F)

Winchester-disk controller detects and corrects errors. Apr 28, pg 83 (P)

Z80A-based microcomputer resides on STD Bus card. Feb 17, pg 103 (P)

Computers/Peripherals

$465 general-purpose CRT terminal includes editing and forms functions. Jan 6, pg 222 (P)

1200-baud full-duplex modem reduces hardware needs. June 23, pg 99 (P)

16-column dot-matrix printers offer interface, power-supply choices. Apr 28, pg 79 (P)

1982 National Computer Conference to focus on professionalism. May 12, pg 53 (N)

8-channel multiplexers speak RS-232 and RS-422. Jan 20, pg 162 (P)

8085-based daisy-wheel printers support multiple functions at low cost. Jan 6, pg 228 (P)

¼-in. cartridge-tape drive employs GCR, data management. Apr 28, pg 81 (P)

Add-in PROM-simulator board supports firmware development. Apr 14, pg 210 (P)

Analog I/O expansion modules up parent I/O cards' flexibility. Jan 6, pg 83 (P)

Apple-compatible simulation package speeds specialized-circuit design. Jan 20, pg 164 (P)

Color-graphics-display controller achieves 1024-pixel resolution. Apr 14, pg 210 (P)

Customized interface circuitry matches modems to the application. Jan 20, pg 166 (P)

Data-acquisition system provides continuous throughput. May 12, pg 77 (P)

Desktop engineering computers (Special Report). May 26, pg 150 (F)

Development system generates vocabulary for voice synthesizers from two vendors. Mar 31, pg 172 (P)

Dual-bus computer family serves 68000, 8086 μPs. Feb 17, pg 101 (P)

EDN Software Tutorial: Symbol tables. Mar 3, pg 141 (F)

Easy-to-modify CRT terminal sports VT-100 compatibility, graphics. Jan 20, pg 170 (P)

Half-height 8-in. floppy-disk drives combine small size with high capacity. Feb 17, pg 228 (P)

Handheld communications terminal simplifies remote data access, entry. Mar 31, pg 173 (P)

Handheld portable terminal features 1600-character memory. Apr 14, pg 214 (P)

Hardware enhancements, software packages increase μC communications capabilities. Feb 17, pg 53 (N)

High-resolution color-graphics terminal provides flexibility at a low price. Jan 20, pg 85 (P)

High-speed coaxial modems feature STD Bus compatibility. Mar 17, pg 101 (P)

IEEE-696-compatible microcomputer board includes OS firmware, floating-point chips. Mar 3, pg 89 (P)

Improve datacomm links by using Manchester code. Feb 17, pg 155 (F)

Instant RS-232 interface adapter mates serial devices with μCs. Jan 6, pg 263 (P)

Integrated engineering workstations simplify complex μP-system design. Mar 31, pg 41 (N)

Interface card and software package measure and store temperature data. Jan 6, pg 219 (P)

LISP processors speed development of artificial-intelligence applications. Jan 6, pg 63 (N)

Local-area networks: Part 1—Technology (Special Report). Feb 17, pg 108 (F)

Local-area networks: Part 2—Low- and midrange products (Special Report). Feb 17, pg 126 (F)

Local-area networks: Part 3—High-performance products (Special Report). Feb 17, pg 142 (F)

Low-cost color-graphics terminals aim at business-system demands. May 26, pg 45 (N)

Low-cost desktop-computer workstations operate stand-alone or in networks. Jan 6, pg 263 (P)

Low-cost intelligent display assemblies simplify μP-bus interfacing. Mar 3, pg 85 (P)

Low-profile floppy-disk drive suits low-cost applications. May 12, pg 234 (P)

Medium and high-speed printers (Special Report). Apr 14, pg 132 (F)

Multibus-compatible board converts text to speech. Apr 28, pg 170 (P)

Multibus-compatible controller board interfaces μC to Ethernet. Mar 31, pg 63 (P)

Multibus-compatible hard-disk controller supports four ¼-in. tape drives. Apr 14, pg 125 (P)

Article Index
January-June 1982

Multibus-compatible memory boards feature ECC, memory management. May 12, pg 238 (P)

NCC '82—A diverse program to meet many needs. May 26, pg 101 (F)

Product choices proliferate in computer-graphics terminals. Feb 3, pg 91 (N)

Real-time micro and minicomputers execute 1 million instructions/sec. Apr 14, pg 205 (P)

Reliability, serviceability overshadow price in less-than-$2000 dot-matrix printers. Jan 20, pg 33 (N)

SID 82 to focus on large-format displays implemented in all technologies. Apr 28, pg 61 (N)

Software package simplifies use of CP/M and MP/M operating systems. Jan 6, pg 227 (P)

Software package's program modules combine to form Z80 operating system. Feb 17, pg 232 (P)

Solve process-control problems with ADA's special capabilities. June 23, pg 143 (F)

Split-screen CRT terminal emphasizes high functionality. Jan 6, pg 261 (P)

Split-screen CRT terminal features multiple character sets. June 23, pg 214 (P)

Upgrade data communications with an RS-449 interface. Feb 17, pg 167 (F)

Use a decision-flow approach to select Winchester-disk backup. Feb 3, pg 137 (F)

User-oriented software-driven terminal easily accommodates special requirements. Feb 3, pg 181 (P)

Versatile floppy-disk controller supports 5¼- and 8-in. drives. Jan 6, pg 262 (P)

Voice-output units show improvement in speech quality, vocabulary, price. May 26, pg 71 (N)

Winchester-disk controller detects and corrects errors. Apr 28, pg 83 (P)

Wire-wrappable patch set eases interface configuration. Feb 17, pg 228 (P)

Z80-based interface board increases printer intelligence. Feb 3, pg 182 (P)

Z80A-based microcomputer resides on STD Bus card. Feb 17, pg 103 (P)

Instrumentation, Test & Measurement

20-MHz function generator creates arbitrary waveforms. June 9, pg 185 (P)

Capable analog testers handle a variety of devices. Jan 20, pg 141 (F)

Capable production-line bubble testers reduce need for incoming-parts inspection. Jan 20, pg 75 (N)

Combining device burn-in with testing promises lower cost and higher reliability. June 9, pg 65 (N)

Construct your own universal development system. June 9, pg 131 (F)

dB meters consume little power. Apr 14, pg 193 (D)

Device programmers extend capabilities to handle multiple PROMs and logic arrays. Feb 3, pg 43 (N)

Digital-storage-scope innovations make signal processing easier. June 9, pg 45 (N)

Digitally test analog gain bandwidths. Feb 17, pg 208 (D)

Dual-channel digital storage scope handles general-purpose applications. Apr 28, pg 168 (P)

Dual-mode signature analysis aids instrument troubleshooting. Apr 14, pg 169 (F)

Ethernet program-development manager shares resources among eight workstations. Apr 14, pg 206 (P)

Extended development-system tools completely support Intel μPs. Feb 17, pg 226 (P)

Generate hard copy from a logic analyzer. Mar 3, pg 168 (M)

Handheld digital thermometers approach benchtop-model performance. Apr 14, pg 89 (N)

High-resolution waveform recorder captures high-frequency signals. Feb 3, pg 107 (P)

IEEE-488-bus-controlled testers reduce in-circuit inspection costs. Jan 6, pg 87 (P)

In-circuit test systems enhance all manufacturing stages. Mar 3, pg 35 (N)

Independent laboratories increasingly help to meet LSI-device testing challenges. Jan 6, pg 47 (N)

Intelligent floppy-disk testers exercise 5¼-, 8-in. drives. June 23, pg 210 (P)

Intelligent instruments (Special Report). Mar 3, pg 92 (F)

Interface allows handheld calculators to control DMM-based instrument systems. Jan 6, pg 224 (P)

Lightweight 100-MHz miniscope suits field-service applications. Mar 31, pg 175 (P)

Lightweight multichannel scopes satisfy production, field-service needs. May 12, pg 83 (P)

Logic analyzers (Special Report). June 9, pg 100 (F)

Low-cost functional tester checks out memory boards. Mar 17, pg 195 (P)

Low-cost logic-state analyzers simplify operator interfacing. May 26, pg 215 (P)

Match true-rms detection to accuracy, cost requirements. Jan 6, pg 139 (F)

Microprocessor development systems (Special Report). Apr 28, pg 86 (F)

μC-based 4½-digit handheld DMM measures continuity, dB and frequency. May 12, pg 234 (P)

μP-controlled function generators offer programmability, versatility. June 9, pg 186 (P)

μPs and fixed-array thermal printheads upgrade strip-chart-recorder performance. Jan 20, pg 57 (N)

Monolithic waveform synthesizer delivers standard and special signals. Apr 14, pg 212 (P)

Multichannel waveform memory recorder stores, plots fast-changing signals. Jan 6, pg 85 (P)

Multiplexed measuring devices reduce in-circuit-test expenses. May 12, pg 187 (F)

Picoammeter/calibrator system eases low-current measurements. Mar 31, pg 143 (F)

Portable fiber-optic signal source tests cable, receivers and systems. Jan 20, pg 166 (P)

Programmable instrument components include 10W voltage and current sources. May 26, pg 96 (P)

Programmable parameter analyzer eases semiconductor evaluations. May 12, pg 229 (P)

Proper measurement techniques reduce thermocouple errors. June 9, pg 115 (F)

Shared-resource board test network separates programming, testing functions. Jan 6, pg 226 (P)

Signature-analysis troubleshooters stimulate and test μP-based boards. Apr 14, pg 119 (P)

Test system optimized for dynamic RAMs suits high-volume production applications. Jan 6, pg 219 (P)

Understanding IEEE-488 basics simplifies system integration. June 9, pg 121 (F)

Versatile μP-based test systems handle multiple Winchester drives. Apr 28, pg 167 (P)

Communications

1200-baud full-duplex modem reduces hardware needs. June 23, pg 99 (P)

Customized interface circuitry matches modems to the application. Jan 20, pg 166 (P)

Ethernet program-development manager shares resources among eight workstations. Apr 14, pg 206 (P)

European military electronics spans avionics, μCs, IR imaging, comm. June 23, pg 67 (N)

Handheld communications terminal simplifies remote data access, entry. Mar 31, pg 173 (P)

High-speed coaxial modems feature STD Bus compatibility. Mar 17, pg 101 (P)

Improve datacomm links by using Manchester code. Feb 17, pg 155 (F)

Local-area networks: Part 1—Technology (Special Report). Feb 17, pg 108 (F)

Article Index
January-June 1982

Local-area networks: Part 2—Low- and midrange products (Special Report). Feb 17, pg 126 (F)

Local-area networks: Part 3—High-performance products (Special Report). Feb 17, pg 142 (F)

Loss-budgeting techniques simplify fiber-optic links. Apr 14, pg 159 (F)

Low-profile fiber-optic modules accommodate wide-ranging applications. Jan 20, pg 168 (P)

Menu-driven communications package interfaces with any μP. June 23, pg 207 (P)

RS-232 cable suits multifunction use. Jan 20, pg 158 (M)

Single-chip FSK modem expands your design choices. May 12, pg 143 (F)

Telecomm ICs and microcomputers compete in offering more user features. Feb 17, pg 61 (N)

Three μC bus configurations vie for 16-bit Eurocard ascendancy. Mar 31, pg 51 (N)

Upgrade data communications with an RS-449 interface. Feb 17, pg 167 (F)

Wire-wrappable patch set eases interface configuration. Feb 17, pg 228 (P)

Components

Adapter eases μP troubleshooting. Apr 14, pg 196 (D)

Although CCD imagers gain on vidicons, promising newcomers wait in wings. Apr 14, pg 101 (N)

Consider IEC standards when choosing mini switches. Feb 3, pg 147 (F)

Elastomeric-based chip-carrier sockets feature high interconnection reliability. Apr 14, pg 129 (P)

Electromechanical and reed relays (Special Report). Jan 6, pg 90 (F)

European military electronics spans avionics, μCs, IR imaging, comm. June 23, pg 67 (N)

Keylock-switch manufacturers broaden lines as system security grows more critical. Mar 17, pg 65 (N)

Low-profile fiber-optic modules accommodate wide-ranging applications. Jan 20, pg 168 (P)

MIL-spec-connector manufacturers focus on evolutionary improvements. June 23, pg 43 (N)

Microwave technology advances as mass applications loom. Feb 3, pg 81 (N)

Miniature fiber-optic data link suits pc-board mounting. Feb 17, pg 236 (P)

PC-mountable chip resistors to see mass use; DIP and SIP networks improve incrementally. Apr 14, pg 71 (N)

Power-line filters with IEC connectors reduce equipment cost, enhance marketability. Mar 17, pg 45 (N)

Rotating inductor transfers power. Jan 6, pg 209 (D)

Slide-actuated DIP switches achieve high contact pressure. Feb 17, pg 230 (P)

Transformers and optocouplers implement isolation techniques. Jan 6, pg 115 (F)

Power Sources

3-, 4-terminal switcher modules offer custom-supply alternative. Jan 20, pg 125 (F)

Fan-cooled switchers produce 500W. Mar 17, pg 196 (P)

Flyforward power-supply design meets Winchester-disk-drive needs. Mar 31, pg 64 (P)

High-reliability open-frame supplies serve domestic/foreign applications. Mar 17, pg 103 (P)

Lithium/thionyl-chloride coin cells furnish 3.6V at capacities to 5.5 Ahr. Jan 6, pg 224 (P)

Manganese-dioxide, lithium power sources sub for high-priced silver-oxide cells. Feb 3, pg 69 (N)

Multiple-output switcher furnishes 1000W. Apr 14, pg 209 (P)

Multiple-output switchers deliver 400W. Mar 31, pg 175 (P)

Option adds IEEE-488 programmability to 0 to 50-kV power-supply series. Feb 3, pg 182 (P)

Quad-output switching supply features high power density. Mar 31, pg 67 (P)

Single-, multiple-output 1500W switchers meet international safety, EMI specs. June 9, pg 188 (P)

Standard switching power supplies meet tri-service MIL specs. Mar 17, pg 107 (P)

Switching power supplies (Special Report). Mar 17, pg 114 (F)

Materials & Packaging

Calculate shield effectiveness with a versatile BASIC program. Apr 28, pg 127 (F)

LCC implementation procedures enhance a valuable technology. June 23, pg 135 (F)

Low-cost pc-board design system features color-graphics capability. Apr 28, pg 172 (P)

Prototype photovoltaic system shows promise, could succeed despite budget cuts. May 12, pg 59 (N)

System packaging (Special Report). Feb 3, pg 112 (F)

Management/Career

A project engineer's guide to MIL tracking, planning. June 23, pg 167 (F)

Article Index, July-December 1981. Mar 3, pg 145 (F)

Ask the key questions when buying a custom IC. Mar 17, pg 145 (F)

Channel conflict properly in your design group. Feb 17, pg 205 (F)

Consider staff, company needs when ordering new equipment. Apr 28, pg 133 (F)

Copyright and patent protection for software continues slow but steady advance. June 23, pg 282 (QL)

Differing product-safety needs needn't bar universal designs. May 26, pg 181 (F)

Documentation usefulness rises with a little fine tuning. Feb 3, pg 161 (F)

Ease the transition from engineer to manager. Apr 14, pg 185 (F)

Electro/82 to explore electronics frontiers from gate arrays to biomedical engineering. Apr 28, pg 55 (N)

Electro/82. May 12, pg 84 (F)

Firms from throughout Europe to introduce products at Paris show. Mar 17, pg 89 (N)

Knowing patent-searching fundamentals speeds the patent-application process. Jan 6, pg 287 (QL)

Knowing product-liability rules can (sometimes) prevent expensive lawsuits. Apr 28, pg 233 (QL)

Learn time-saving techniques for effective management. May 12, pg 195 (F)

Manage contractors with care to ensure design success. Mar 31, pg 151 (F)

Match CAD/CAM capabilities to your design needs. June 9, pg 161 (F)

Military-electronics glossary helps cut the abbreviations fog. June 23, pg 159 (F)

Predict your invention's market success with a commercial-potential checklist. Feb 17, pg 284 (QL)

Quality circles boost productivity, help management tap designer resources. Apr 28, pg 45 (N)

Study your employment contract carefully to protect your rights. Mar 17, pg 261 (QL)

Subject-matter, "unobviousness" tests determine an invention's patentability. Jan 20, pg 212 (QL)

Weigh all make-vs-buy factors for custom/semicustom ICs. Mar 3, pg 127 (F)

Well-written documentation leaves nothing to imagination. Jan 6, pg 127 (F)

Article Interest Quotient (Circle One)
***High* 494 *Medium* 495 *Low* 496**